



Complete Summary

TITLE

Use of high-risk medications in the elderly: percentage of Medicare members 65 years of age and older who received at least one high-risk medication.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 1, Narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. 90 p.

National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of Medicare members 65 years of age and older who received at least one high risk medication (see the related National Quality Measures Clearinghouse [NQMC] summary of the National Committee for Quality Assurance [NCQA] measure [Use of high-risk medications in the elderly: percentage of Medicare members 65 years of age and older who received at least two different high-risk medications](#)).

RATIONALE

This Patient Safety measure addresses medication management to prevent the harms associated with certain medications in the elderly.

Certain medications are associated with increased risk of harms from drug side-effects and drug toxicity and pose a concern for patient safety. There is clinical consensus that these drugs pose increased risks in the elderly. Studies link prescription drug use by the elderly with adverse drug events that contribute to hospitalization, increased length of hospital stay, increased duration of illness, nursing home placement and falls and fractures that are further associated with physical, functional and social decline in the elderly.

Reducing prescriptions of high-risk drugs in the elderly also represents an opportunity to reduce the costs associated with the harm from medications (e.g., hospitalizations from drug toxicity) and encourage clinicians to consider safer, alternative medications. Reducing unnecessary prescribing will also help to reduce cost, given that the elderly population represent one third of all prescription drug expenditures in the U.S. but comprises only 13 percent of the population.

PRIMARY CLINICAL COMPONENT

Medication safety; use of high-risk medications in the elderly

DENOMINATOR DESCRIPTION

Medicare members 65 years of age and older as of December 31 of the measurement year (see the "Description of Case Finding" field in the Complete Summary)

NUMERATOR DESCRIPTION

Members who received at least one prescription dispensed for any high-risk medication during the measurement year (refer to Table DAE-A in the original measure documentation for high-risk medications)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicare
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than or equal to 65 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

- One in 20 prescriptions filled by the elderly are for drugs classified as "always avoid"; more than 1 in 10 are for drugs that would rarely be considered appropriate.
- Studies have found that 21 to 37 percent of elderly patients filled at least one potentially inappropriate prescription and more than 15 percent filled at least two.

EVIDENCE FOR INCIDENCE/PREVALENCE

Curtis LH, Ostbye T, Sendersky V, Hutchison S, Dans PE, Wright A, Woosley RL, Schulman KA. Inappropriate prescribing for elderly Americans in a large outpatient population. Arch Intern Med 2004 Aug 9;164(15):1621-5. [36 references] [PubMed](#)

Simon SR, Chan KA, Soumerai SB, Wagner AK, Andrade SE, Feldstein AC, Lafata JE, Davis RL, Gurwitz JH. Potentially inappropriate medication use by elderly persons in U.S. Health Maintenance Organizations, 2000-2001. J Am Geriatr Soc 2005 Feb;53(2):227-32. [PubMed](#)

ASSOCIATION WITH VULNERABLE POPULATIONS

- The elderly face particular challenges in prescription drug use. Expenditures for prescription drugs in the U.S. are disproportionately high among those over 65 years of age. This population is twice as likely as others to experience adverse drug events and seven times as likely to be hospitalized.
- Seniors receiving inappropriate medications are more likely than others to report poor health status at a follow-up visit with their physician.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

Families USA. Cost overdose: growth in drug spending for the elderly, 1992-2010. Washington (DC): Families USA; 2000. 2 p.

Fu AZ, Liu GG, Christensen DB. Inappropriate medication use and health outcomes in the elderly. J Am Geriatr Soc 2004 Nov;52(11):1934-9. [PubMed](#)

National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

BURDEN OF ILLNESS

Studies link prescription of inappropriate drugs to higher risk of harmful side effects, hospitalization, increased length of illness, nursing home placement and falls and fractures that can hasten physical, functional and social decline.

See also the "Rationale" field.

EVIDENCE FOR BURDEN OF ILLNESS

Families USA. Cost overdose: growth in drug spending for the elderly, 1992-2010. Washington (DC): Families USA; 2000. 2 p.

Fu AZ, Liu GG, Christensen DB. Inappropriate medication use and health outcomes in the elderly. J Am Geriatr Soc 2004 Nov;52(11):1934-9. [PubMed](#)

Gurwitz JH, Field TS, Harrold LR, Rothschild J, Debellis K, Seger AC, Cadoret C, Fish LS, Garber L, Kelleher M, Bates DW. Incidence and preventability of adverse drug events among older persons in the ambulatory setting. JAMA 2003 Mar 5;289(9):1107-16. [PubMed](#)

UTILIZATION

See the "Rationale" field.

COSTS

See the "Rationale" field.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Safety

Data Collection for the Measure

CASE FINDING

Both users and nonusers of care

DESCRIPTION OF CASE FINDING

Medicare members 65 years of age and older as of December 31 of the measurement year who were continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days during the measurement year

DENOMINATOR SAMPLING FRAME

Enrollees or beneficiaries

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Medicare members 65 years of age and older as of December 31 of the measurement year

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Patient Characteristic

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS**Inclusions**

Members who received at least one prescription dispensed for any high-risk medication during the measurement year (refer to Table DAE-A in the original measure documentation for high-risk medications)

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Pharmacy data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a lower score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time

External comparison of time trends

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Use of high-risk medications in the elderly (DAE).

MEASURE COLLECTION

[HEDIS® 2009: Healthcare Effectiveness Data and Information Set](#)

MEASURE SET NAME

[Effectiveness of Care](#)

MEASURE SUBSET NAME

[Medication Management](#)

DEVELOPER

National Committee for Quality Assurance

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

ENDORSER

National Quality Forum

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2005 Jan

REVISION DATE

2008 Jul

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2008. Healthcare effectiveness data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2007 Jul. various p.

SOURCE(S)

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MEASURE AVAILABILITY

The individual measure, "Use of High-Risk Medications in the Elderly (DAE)," is published in "HEDIS® 2009. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2008: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2008. 131 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on June 6, 2006. The information was not verified by the measure developer. This NQMC summary was updated by ECRI on January 31, 2007. The updated information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on April 21, 2008. The information was verified by the measure developer on May 30, 2008. This NQMC summary was updated again by ECRI Institute on March 20, 2009. The information was verified by the measure developer on May 29, 2009.

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